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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

	Application Number	10/698,995	
	Filing Date	October 30, 2003	
	First Named Inventor	Dr. Atul Navinchandra Parikh	
	Group Art Unit	1762	
	Examiner Name	Unassigned	
Total Number of Pages in This Submission	7	Attorney Docket Number	309J-000740US

ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers <i>(for an Application)</i>	<input type="checkbox"/> After Allowance Communication to Group
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<input type="checkbox"/> Amendment / Response	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group <i>(Appeal Notice, Brief, Reply Brief)</i>
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Please charge Deposit Account No. 50-0893 for any additional fees associated with this paper or during the pendency of this application, including any extensions of time for consideration of the documents enclosed.

Remarks

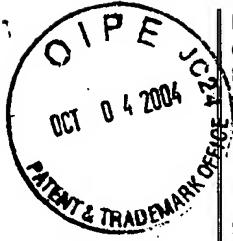
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Firm or Individual name	Paul Littlepage, Reg. No. 48,581, Quine Intellectual Property Law Group, P.C.
Signature	
Date	September 30, 2004

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

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Signature		Date	September 30, 2004



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QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

By Deborah Berwick
Deborah Berwick

Attorney Docket No. 309J-000740US
Client Ref. No. 2003-086-5

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Dr. Atul Navinchandra Parikh, et al.

Application No.: 10/698,995

Filed: October 30, 2003

For: Direct micro-patterning of lipid bilayers using UV light and selected uses thereof

Examiner: Unassigned

Art Unit: 1762

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR § 1.97 and
§ 1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

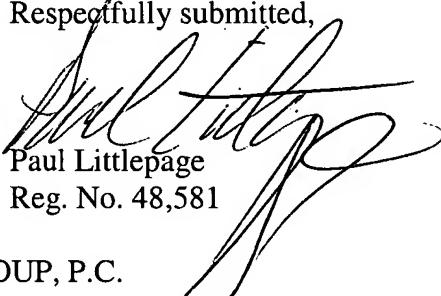
Dr. Atul Navinchandra Parikh, et al.

Application No.: 10/698,995

Page 2

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action on the merits per 37 CFR 1.97(b)(3). However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-0893. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,


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Substitute for form 1449A-B/PTO

Complete if Known

Application Number	10/698,995
Filing Date	October 30, 2003
First Named Inventor	Dr. Atul Navinchandra Parikh
Group Art Unit	1762
Examiner Name	Unassigned
Attorney Docket Number	309J-000740US
Date Submitted	September 30, 2004

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)



U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			
1	2002/0094544	A1		Fang et al.	07-18-2002	
2	6,228,326			Boxer et al.	05-08-2001	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appeal	T
		Office	Number	Kind Code (if known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
	3	ANDERSON ET AL. (2000) "Concentration of MHC Class II Molecules in Lipid Rafts Facilitates Antigen Presentation." <i>Nature Immunology</i> 1(2): 156-162.	
	4	ANDERSON ET AL. (2002) "A Role for Lipid Shells in Targeting Proteins to Caveolae, Rafts, and Other Lipid Domains." <i>Science</i> 296:1821-1825.	
	5	AXELROD ET AL. (1979) "Mobility Measurement by Analysis of Fluorescence Photobleaching Recovery Kinetics." <i>Biophysical Journal</i> 16:1055-1069	
	6	BAYERL AND BLOOM (1990) "Physical properties of single phospholipid bilayers adsorbed to micro glass beads." <i>Biophysical Journal</i> 58:357-362.	
	7	BAYLEY AND CREMER (2001) "Stochastic sensors inspired by biology." <i>Nature</i> 413:226-230.	
	8	BOXER (2000) "Molecular transport and organization in supported lipid membranes." <i>Current Opinion in Chemical Biology</i> 4:704-709.	
	9	CREMER ET AL. (1999) "Creating Spatially Addressed Arrays of Planar Supported Fluid Phospholipid Membranes." <i>Journal of American Chemistry Society</i> 121:8130-8131.	
	10	CREMER ET AL. (1999) "Formation and Spreading of Lipid Bilayers on Planar Glass Supports." <i>Journal of Physical Chemistry B</i> 103(13):2554-2559.	
	11	DIETRICH ET AL. (2001) "Lipid Rafts Reconstituted in Model Membranes." <i>Biophysical Journal</i> 80:1417-1428.	
	12	EISERICH ET AL. (1998) "Formation of nitric oxide-derived inflammatory oxidants by myeloperoxidase in neutrophils." <i>Nature</i> 391:393-397.	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	13	EISERICH ET AL. (2002) "Myeloperoxidase, a Leukocyte-Derived Vascular NO Oxidase." <i>Science</i> 296:2391-2394.	
	14	FANG ET AL. (2002) "Membrane Protein Microarrays." <i>Journal of American Chemistry Society</i> 124(11): 2394-2395.	
	15	FISHMAN ET AL. (1993) "Gangliosides as Receptors for Bacterial Enterotoxins." <i>Advances in Lipid Research</i> 25:165-187.	
	16	FODOR ET AL. (1991) "Light-Directed, Spatially Addressable Parallel Chemical Synthesis." <i>Science</i> 251:767-773	
	17	FRISBIE ET AL. (1994) "Functional Group Imaging by Chemical Force Microscopy." <i>Science</i> 265:2071-2074.	
	18	GRAKOU ET AL. (1999) "The Immunological Synapse: A Molecular Machine Controlling T Cell Activation." <i>Science</i> 285: 221-227.	
	19	GROVES ET AL. (1995) "Electric Field-Induced Concentration Gradients in Planar Supported Bilayers." <i>Biophysical Journal</i> 69:1972-1975.	
	20	GROVES ET AL. (1997) "Micropatterning Fluid Lipid Bilayers on Solid Supports." <i>Science</i> 275:651-653.	
	21	GROVES ET AL. (1998) "Substrate-Membrane Interactions: Mechanism for Imposing Patterns on a Fluid Bilayers Membrane." <i>Langmuir</i> 14(12): 3347-3350.	
	22	GROVES ET AL. (2001) "Control of Cell Adhesion and Growth with Micropatterned Support Lipid Membranes." <i>Langmuir</i> 17(17):5129-5133.	
	23	GROVES AND BOXER. (2002) "Micropattern Formation in Supported Lipid Membranes." <i>Accounts of Chemical Research</i> 35:149-157.	
	24	HOVIS AND BOXER (2001) "Patterning and Composition Arrays of Supported Lipid Bilayers by Microcontact Printing." <i>Langmuir</i> 17(11):3400-3405.	
	25	HOVIS AND BOXER (2000) "Patterning Barriers to Lateral Diffusion in Supported Lipid Bilayer Membranes by Blotting and Stamping." <i>Langmuir</i> 16(3):894-897.	
	26	KALB ET AL. (1992) "Formation of supported planar bilayers by fusion of vesicles to supported phospholipid monolayers." <i>Biochimica et Biophysica Acta</i> 1103:307-316.	
	27	KUNG ET AL. (2000) "Printing via Photolithography on Micropartitioned Fluid Lipid Membranes." <i>Advanced Materials</i> 12(10): 731-734.	
	28	KUNG ET AL. (2000) "Patterning Hybrid Surfaces of Proteins and Supported Lipid Bilayers." <i>Langmuir</i> 16(17):6773-6776.	

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	29	LUM ET AL. (2002) "Dynamic Regulation of LFA-1 Activation and Neutrophil Arrest on Intercellular Adhesion Molecule 1 (ICAM-1) in Shear Flow." <i>The Journal of Biological Chemistry</i> 277:20660-20670.	
	30	MAYER ET AL. (1986) "Vesicles of variable sizes produced by a rapid extrusion procedure." <i>Biochimica et Biophysica Acta</i> 858:161-168.	
	31	MCCONNELL ET AL. (1986) "Supported planar membranes in studies of cell-cell recognition on the immune system." <i>Biochimica et Biophysica Acta</i> 864:95-106.	
	32	MORIGAKI ET AL. (2001) "Patterning Solid-Supported Lipid Bilayer Membranes by Lithographic Polymerization of a Diacetylene Lipid." <i>Angew Chem Int. Ed.</i> 40:172-174.	
	33	NISSEN ET AL. (2001) "Interface Dynamics of Lipid Membrane Spreading on Solid Surfaces." <i>Physical Review Letters</i> 86:1904-1907.	
	34	OVERNEY ET AL. (1994) "Force Microscopy Study of Friction and Elastic Compliance of Phase-Separated Organic Thin Films." <i>Langmuir</i> 10:1281-1288.	
	35	PARIKH ET AL. (1999) "Infrared Spectroscopic Characterization of Lipid-Alkylsiloxane Hybrid Bilayer Membranes at Oxide Substrates." <i>Langmuir</i> 15:5369-5381.	
	36	PLANT (1993) "Self-Assembled Phospholipid/Alkanethiol Biomimetic Bilayers on Gold." <i>Langmuir</i> 9:2764-2767.	
	37	ROSENBERGER ET AL. (2000) "Microbial Pathogenesis: Lipid Rafts as Pathogen Portals." <i>Current Biology</i> 10: R823-R825.	
	38	SACKMANN (1996) "Supported Membranes: Scientific and Practical Applications." <i>Science</i> 271:43-48.	
	39	SACKMANN AND TANAKA (2000) "Supported Membranes on Soft Polymer Cushions: Fabrication, Characterization and Applications." <i>Trends in Biotechnology</i> 18:58-64.	
	40	SALOME ET AL. (1998) "Characterization of Membrane Domains by FRAP Experiments at Variable Observation Areas." <i>Eur Biophys Journal</i> 27:391-402.	
	41	SANDRE ET AL. (1999) "Dynamics of Transient Pores in Stretched Vesicles." <i>Proceedings of the National Academy of Sciences USA</i> 96:10591-10596.	
	42	SIMMONS AND IKONEN (1997) "Functional Rafts in Cell Membranes." <i>Nature</i> 387:569-572.	
	43	SINGH AND KELLER (1991) "Atomic Force Microscopy of Supported Planar Membrane Bilayers." <i>Biophysical Journal</i> 60:1401-1410.	
	44	SINNER AND KNOLL. (2001) "Functional Tethered Membranes." <i>Current Opinion in Chemical Biology</i> 5(6): 705-711.	

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	45	SOHN ET AL. (2003) "Crucial Role of Local Peroxynitrite Formation in Neutrophil-induced Endothelial Cell Activation." <i>Cardiovascular Research</i> 57(3):804-815.	
	46	SOUUMPASIS (1983) "Theoretical Analysis of Fluorescence Photobleaching Recovery Experiments." <i>Biophysical Journal</i> 41:95-97.	
	47	ULMAN ET AL. (1997) "Micropatterning Fluid Membranes." <i>Advanced Matter</i> 9(14): 1121-1123.	
	48	VAN MEER (2002) "The Different Hues of Lipid Rafts." <i>Science</i> 296:855-857.	
	49	VAN OUDENAARDEN AND BOXER (1999) "Brownian Ratchets: Molecular Separations inLipid Bilayers Supported on Patterned Arrays." <i>Science</i> 285(5430):1046-1048.	
	50	WENTWORTH ET AL. (2002) "Evidence for Antibody-Catalyzed Ozone Formation in Bacterial Killing and Inflammation." <i>Science</i> 298:2195-2199.	

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